### Amendments to the Specification:

Please insert before line 1 of page 1 the following heading:

#### TITLE OF THE INVENTION

Please insert on line 2 of page 1 the following heading:

#### CROSS REFERENCE TO RELATED APPLICATIONS

This application claims priority to United Kingdom application no. 010282517 filed on 5 February, 2003 to the extent permitted by law.

Please insert on line 5 of page 1 the following headings:

#### BACKGROUND OF THE INVENTION

# (1.) FIELD OF THE INVENTION

Please insert on line 11 of page 1 the following heading:

## (2.) DESCRIPTION OF THE RELATED ART

Please insert on line 20 of page 1 the following heading:

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWINGS

Please insert on line 9 of page 4 the following heading:

#### DETAILED DESCRIPTION OF THE INVENTION

Please replace the paragraph starting on line 25 of page 3 with the following amended paragraph:

The invention also comprises an apparatus according to the invention in which said duct is mounted in pipework for conveying the fluid flow, the processing means being located at a location remote therefrom and the coupling means coupling the processing means and the light-responsive detection means. Said pipework may be

for conveying water into a well in a hydrocarbon production system and in this case the er-each first and second light-transmissive parts, the er-each light generating means and the er-each-light-responsive means may be the sub-sea, said remote location being, for example, a topside platform.